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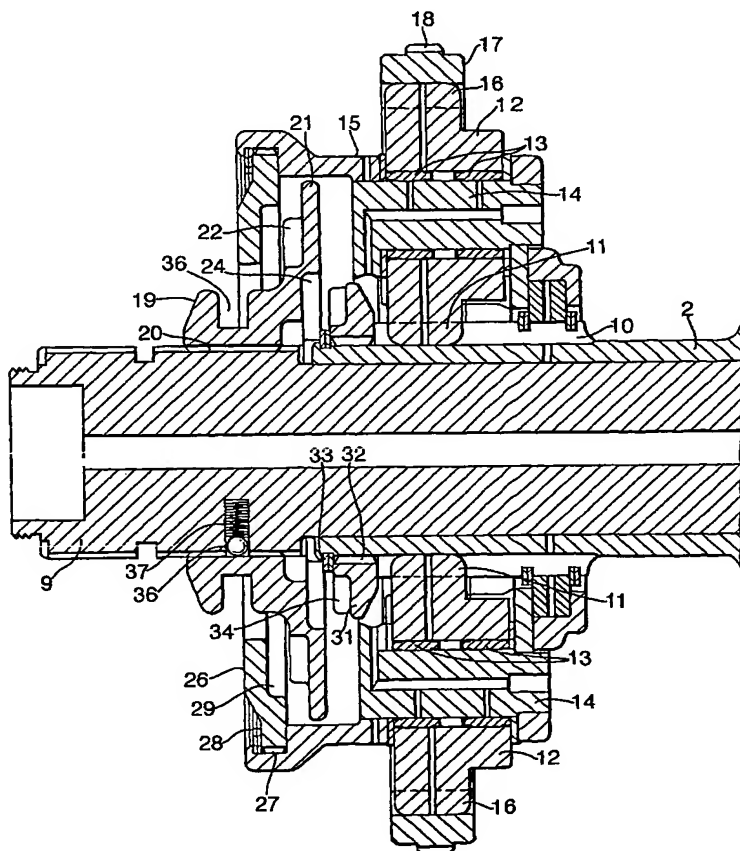
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0327904.9 2 December 2003 (02.12.2003) GB</p> <p>(71) Applicant (for all designated States except US): QINETIQ LIMITED [GB/GB]; Registered Office, 85 Buckingham Gate, London SW1E 6PD (GB).</p> | <p>(72) Inventor; and
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- (54) Title: GEAR CHANGE MECHANISM**



(57) Abstract: A gear change mechanism coupling a pair of shafts (2) and (9) employs a planetary gear set comprising a sun gear (10) fast with shaft (2), planet gears (12) in a planet carrier (15), and an annulus or ring gear (17), the latter being fixed. A selector hub (19) slidable on shaft (9) has sets of radially spaced dogs (22) and (24) to engage with corresponding dogs (29) and (34) on the planet carrier and sun gear respectively, so as to couple the shafts (2) and (9) at two different ratios depending on the axial position of the selector hub. This results in a more axially compact package than conventional dog clutch gear changers. In an alternative embodiment a reversing mechanism is provided by fixing the planet carrier and engaging the selector hub with the sun gear or annulus depending on its axial position.



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